



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7

11201 Renner Boulevard
Lenexa, Kansas 66219

JUL 23 2015

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Article Number: 7014 1200 0000 6125 8904

Mr. Jeff L. Friedrich
General Manager
CHS, Inc.
809 East Broadway
Wausa, Nebraska 68786

RE: CHS, Inc.
Wausa, Nebraska
RCRA ID No.: NER000506303

Dear Mr. Friedrich:

Letter of Warning/Request for Information

On May 5, 2015, a representative of the U.S. Environmental Protection Agency (EPA) inspected your facility. The inspection was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA).

My staff has reviewed the inspection report, and your May 18, 2015 response to the Notice of Violation (NOV) and determined that violations of RCRA were documented. We are requesting additional information regarding your facility's compliance status. Enclosed is a list of violations followed by a list of questions and/or requested information. Also enclosed are instructions to be used in providing your response. Please carefully read and follow these instructions. Your response to this request in accordance with the instructions is required by Section 3007 of RCRA and substantial penalties may result from not complying. Please note that EPA reserves its right to pursue appropriate enforcement actions, including penalties, for violations discovered as a result of the inspection, regardless of whether the violations were subsequently corrected.



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Within thirty (30) calendar days of receiving this letter, please mail your response to: Kevin D. Snowden, AWMD/WEMM, U.S. Environmental Protection Agency, 11201 Renner Boulevard, Lenexa, Kansas 66219. To request an extension of the time limit, follow the instructions in the enclosure. Please direct all questions concerning this letter to Mr. Snowden, of my staff, at (913) 551-7022, or at snowden.kevin@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. Toensing', with a stylized flourish at the end.

Donald Toensing,
Chief

Waste Enforcement and Materials Management
Branch
Air and Waste Management Division

Enclosures

cc: Mr. Jeff Edwards, Nebraska Department of Environmental Quality

List of Violations
CHS, Inc.
Wausa, Nebraska
RCRA ID No.: NER000506303

1. Title 128, Chapter 4, 002 referenced by Title 128, Chapter 9, 007.01 – Failure to make a hazardous waste determination on the following solid wastes:
 - a. used lamps
 - b. fuel dispenser filters;
 - c. empty aerosol cans;
 - d. *parts washer solvents;
 - e. spent personal protective equipment (i.e., gloves); and
 - f. sump pit residue/sludge.
 2. *Title 128, Chapter 7, 010.04B – Failure to comply with the used oil marketer requirements.
 3. *Title 128, Chapter 7, 009.04A3 – Failure to label or mark clearly a used oil container or aboveground tank with a volume of 25 gallons or greater with the words, “Used Oil.”
- * - This violation was either addressed at the time of the inspection or by the facility’s NOV response dated May 18, 2015.

List of Requested Information
CHS, Inc.
Wausa, Nebraska
RCRA ID No.: NER000506303

1. Please identify all persons responding to the questions in this letter. Please include names, titles, and telephone numbers, if different from the facility's telephone number.
2. In reference to Violation No. 1, please provide the following information concerning your hazardous waste determination on each waste stream:
 - a. a determination of whether or not the waste has been excluded from regulation under 40 CFR Part 261.4;
 - b. a determination of whether or not the waste has been listed as a hazardous waste in Subpart D of 40 CFR Part 261. **If the waste is a listed hazardous waste, please provide the listed waste code(s) in your response;** and
 - c. a determination of whether or not the waste is identified in 40 CFR Part 261 Subpart C. To determine whether the waste exhibits any of the hazardous characteristics in Subpart C, the waste may need to be analyzed using one of the methods found in Subpart C of 40 CFR Part 261, or by applying knowledge of the waste characteristics based upon the materials or processes used. Any laboratory analyses used to make this determination must be provided to EPA as well as a detailed description as to how each sample was taken. **If the waste is a characteristic hazardous waste, please provide the characteristic waste code(s) in your response.**
 - d. If your facility elects to apply knowledge to make a waste determination of the waste streams identified above, you must provide a detailed explanation and your reasoning regarding the basis for this determination. **Also, if you apply knowledge to make the waste determination, please include all hazardous waste codes for the waste in your response.**
 - e. Please provide your facility's monthly generation rate for each waste stream determined to be a hazardous waste. Also, indicate the amount of each of these hazardous wastes that are currently stored at your facility.
3. According to the Overview of Universal Waste Regulations table included in the Nebraska Department of Environmental Quality's (NDEQ) Universal Waste guidance document (see attached), universal waste is prohibited from being disposed. Therefore, in reference to Violation 1.a., please indicate how your company will be managing its used lamps in the future. If your facility will be managing its used lamps as universal waste, please provide documents and/or photographs demonstrating that your facility is meeting the requirements listed in Title 128, Chapter 25. If your facility will be managing its used lamps as hazardous waste, please provide the appropriate information as required in your response to Request for Information No. 2.

4. According to your May 18, 2015 NOV response, the facility's used oil filters are non-hazardous waste and that you were in the process of finding a third party vendor to pick up your facility's used oil and used oil filters. However, according to the EPA's inspection report (see page 6), this violation was for failure to complete a hazardous waste determination on the fuel dispenser filters that are located at your 800 East Broadway address (see Violation 1.b). Therefore, please provide your hazardous waste determination for your facility's fuel dispenser filters as required by Request for Information No. 2. Please ensure that your response to this letter provides copies of the analytical report for these samples or, if using process knowledge, provide a detailed rationale explaining your determination.
5. Regarding Violation No. 1.c., your May 18, 2015 response indicated that your facility's used aerosol cans were disposed of as "RCRA empty" in the facility's dumpster. However, according to the NDEQ Aerosol Can guidance (see attached), "The 'RCRA empty' aerosol can of and by itself is usually considered hazardous waste because it exhibits the characteristic of reactivity (D003). That is, it is capable of detonation or explosive reaction if it is subjected to a strong initiating source or it is heated under confinement (Title 128, Chapter 3, §009.01F). The empty aerosol cans generated in a month would normally need to be included in a facility's monthly hazardous waste totals unless they are managed as scrap metal. The characteristic of reactivity can generally be removed if the aerosol can is safely depressurized or emptied via puncturing." Therefore, please provide your hazardous waste determination for your facility's used aerosol cans as required by Request for Information No. 2. Please ensure that your response to this letter provides copies of the analytical report for these samples or, if using process knowledge, provide a detailed rationale explaining your determination.
6. Regarding Violation 1.e., your May 18, 2015 response indicates that, "The used gloves do not intentionally come into contact with any raw chemical products." In addition, your response says, "When discarded, the spent gloves are not associated with any free-liquid raw chemical products." While your response indicates that the used gloves are "non-hazardous," it fails to provide any reason why the used gloves that come into contact with free liquids (product or waste) are non-hazardous. Therefore, please complete a hazardous waste determination for your facility's used gloves as required by Request for Information No. 2. Please ensure that your response to this letter provides copies of the analytical report for these samples or, if using process knowledge, provide a detailed rationale explaining your determination.
7. Regarding Violation 1.f., your May 18, 2015 response indicates that samples, "of the sump pit residue/sludge will be collected for laboratory analyses to determine whether it exhibits hazardous waste characteristics and to determine proper disposal options." Therefore, please complete a hazardous waste determination for your facility's liquid fertilizer building sump pit residue/sludge as required by Request for Information No. 2. Your analyses should include all pesticides and herbicides used, mixed, and/or formulated by your facility. Please ensure that your response to this letter provides copies of the analytical report for these samples or, if using process knowledge, provide a detailed rationale explaining your determination.

3007 RESPONSE INSTRUCTIONS

- Identify the Person(s) responding to this request on your behalf.
- Address each numbered item separately, and precede each answer with the number of the item to which it responds.
- For each numbered item, identify all documents consulted, examined, or referred to in the preparation of the answer, or that contain information responsive to the requested item. Provide true, accurate, and legible copies of all such documents. (If information responsive to an item is available but there are no relevant source documents, you must still provide the information.)
- For each document provided, indicate on the document (or in some similar manner) the number of the item to which it responds.
- For each numbered item, identify all persons consulted in the preparation of the answer.
- For purposes of this request, the term "you" or "your" refers to the company, corporation and any officer, principal, agent employee, or any other person(s) associated in any capacity.
- If information responsive to a requested item is not in your possession, identify the person(s) from whom the information may be obtained.
- If information that is not known or available at the time you make your response later becomes known or available to you, you must supplement your response.
- If, at any time after you submit your response, you find that any part of the information you submitted is incomplete, false, or misrepresents the truth, you must notify the EPA immediately.
- You must provide the requested information even though you consider it confidential information or trade secrets. If you want to make a confidentiality claim covering part or all of the information submitted, identify the material with words such as "trade secret," "proprietary," or "company confidential."
- The EPA will disclose this information only to the extent and by the means described in 40 CFR Part 2, Subpart B., provided that it qualifies as confidential business information.
- A request for an extension to the time limit for responding must be in writing and must be postmarked within five (5) calendar days of receipt of this information request. Address it to the person identified in the cover letter to receive your response.
- Copies of the Code of Federal Regulations may be obtained from the U.S. Government Bookstores or on the Internet at www.epa.gov/epahome/cfr40.htm.
- This request for information is not subject to the approval requirements of the Paperwork Reduction Act of 1980.
- The EPA encourages you to conserve resources. Suggested methods include use of recycled paper, printing on both sides (duplex printing), and when possible submitting documents electronically (i.e., email or compact discs). If hard copy submittals are necessary, please do not submit documents in binders.

Not responding to this information request within the stated time limit and in accordance with these instructions may subject your facility to an enforcement action which could include the imposition of penalties of up to \$37,500 per violation, per day of continued noncompliance. Providing false, fictitious, or fraudulent statements or representations could lead to criminal penalties.



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL GUIDANCE DOCUMENT

08-019

Revised January 2013

UNIVERSAL WASTE REGULATIONS

The universal waste regulations provide alternate management standards for certain hazardous wastes. These regulations are found at Chapter 25 of Title 128 – Nebraska Hazardous Waste Regulations.

WHAT ARE UNIVERSAL WASTES?

Used batteries that would be hazardous waste, such as nickel-cadmium (Ni-Cad), mercuric-oxide, and certain lithium batteries, found in many items common to small businesses and households can be universal waste. These batteries are from such items as electronic equipment, cellular telephones, portable computers, and emergency generator backup lighting. This could include spent lead-acid batteries, but these batteries are usually best managed under a separate hazardous waste exemption for lead-acid batteries in Title 128, Chapter 7.

Pesticides that would be hazardous waste that have been recalled (suspended and canceled as part of a voluntary or mandatory recall) and stocks of other unused pesticides that are collected and managed as part of a waste pesticide collection program can be universal waste.

Mercury-containing items, such as thermostats, barometers, thermometers, certain gages, and electrical switches can be universal waste. The item must contain elemental mercury.

Spent lamps that would be hazardous waste, such as fluorescent, high-pressure sodium, mercury vapor, and metal halide lamps that are located in commercial, industrial, agricultural, and community buildings can be universal waste.

Electronic items that would be hazardous waste such as cathode ray tubes or other electronics that might be found to be hazardous waste can be universal waste. Electronic items are electronic equipment that contains one or more circuit boards or other complex circuitry. Examples of electronic items include laptop computers, telephones, radios, keyboards, and stereos. They also include components and subassemblies or other parts derived from the disassembly of electronic items.

Note: A material cannot be a universal waste unless it would meet the definition of hazardous waste and fits in one of the categories above.

WHO IS AFFECTED BY THIS REGULATION?

Businesses. Universal wastes are generated by small and large businesses that are regulated under the hazardous waste regulations (Title 128 – Nebraska Hazardous Waste Regulations) and have been required to handle these materials as hazardous wastes. The universal waste regulations ease the regulatory burden on businesses that generate these wastes. Specifically, it streamlines the requirements related to notification, labeling, marking, prohibitions, accumulation time limits, employee training, response to releases, off-site shipments, tracking, and transportation.

The universal waste regulations allow businesses to accumulate these materials on-site. It also allows companies to transport them with a common carrier, instead of a hazardous waste transporter, and no longer requires companies to use a hazardous waste manifest. The universal waste regulations will make it easier for companies to establish collection programs and to participate in manufacturer take-back programs.

Conditionally Exempt Small Quantity Generators, Small Quantity Generators, and Large Quantity Generators are allowed to accumulate universal waste for recycling without having to include these wastes when counting their hazardous waste generation rates and storage times. This could affect facilities that have a lot of universal waste and small amounts of other hazardous waste by qualifying them for a lower generator status.

Businesses, for regulatory purposes, also include governmental agencies, not-for-profit organizations, schools and colleges, charitable organizations, churches, farms and ranches, and hospitals.

Households. Universal wastes from households are not subject to the universal waste regulations and items that might otherwise qualify as universal waste may be disposed of in the trash. However, these wastes can be better managed in a collection or recycling program. NDEQ encourages households to take these items to collection sites located at nearby businesses or other centers or household hazardous waste collection events for recycling if available.

Communities. Communities can work with both businesses and residents to facilitate proper recycling or disposal of universal wastes. By easing the regulatory burden on businesses, communities can establish collection programs or assist area businesses in setting up collection programs.

Categories of Universal Waste Handlers. The four categories of universal waste handlers are:

1. Small Quantity Handlers of Universal Waste – accumulate less than 5,000 kg (11,000 lbs) of universal waste.
2. Large Quantity Handlers of Universal Waste – accumulate 5,000 kg (11,000 lbs) or more of universal waste.
3. Transporter – transport universal wastes from handlers to other handlers, or destination facilities.
4. Destination Facilities – treat, dispose, or recycle universal wastes.

Note: A universal waste handler and a hazardous waste generator have different meanings.

What Requirements Apply to Universal Waste?

Refer to the attached table “An Overview of Title 128, Chapter 25, Universal Waste Regulation.” It includes references to the Chapter 25 paragraphs.

References:

- Title 128 – Nebraska Hazardous Waste Regulations: <http://deq.ne.gov/> click “Rules and Regulations”
- NDEQ Fact Sheets and Guidance Documents: <http://deq.ne.gov/> click on “Publications Forms”
- NDEQ Hazardous Waste Compliance Assistance (402) 471-8308

Attachment: Overview of Title 128, Chapter 25 Universal Waste Regulations.

Produced by: Waste Management Section, Nebraska Department of Environmental Quality, P.O. Box 98922, Lincoln, NE 68509-8922; phone (402) 471-4210, toll free (402) 253-2603. To view this, and other information related to our agency, visit our web site at <http://deq.ne.gov/>. This material is intended for guidance purposes only. It is not meant to substitute for the regulations found in Title 128 – Nebraska Hazardous Waste Regulations or other applicable Nebraska environmental regulations.

Overview of Title 128, Chapter 25 Universal Waste Regulations

Participants in Universal Waste System (§=Chapter 25 paragraph)	Small Quantity Handlers of Universal Waste <5,000 kg Accumulation	Large Quantity Handlers of Universal Waste ≥5,000 kg Accumulation	Universal Waste Transporters	Destination Facilities
Prohibitions	<ul style="list-style-type: none"> Prohibited from disposing, diluting or treating universal wastes 	<ul style="list-style-type: none"> Prohibited from disposing, diluting or treating universal wastes 	<ul style="list-style-type: none"> Prohibited from disposing of diluting or treating universal wastes 	Comply with RCRA TSD and Recycle Facility Requirements See §038 thru §040
Notification	<ul style="list-style-type: none"> No requirements 	<ul style="list-style-type: none"> Must notify NDEQ and receive NDEQ/EPA identification number if they have not previously received one 	<ul style="list-style-type: none"> Comply with DOT requirements 	
Waste Management Requirements (§012 or §023)	<ul style="list-style-type: none"> Must manage in a manner that prevents releases to the environment that is waste specific 	<ul style="list-style-type: none"> Must manage in a manner that prevents releases to the environment. Waste specific 	<ul style="list-style-type: none"> Comply with DOT requirements 	
Labeling/Marking (§013 or §024)	<ul style="list-style-type: none"> Must label or mark universal wastes or containers of universal wastes to identify universal waste type with specific wording required 	<ul style="list-style-type: none"> Must label or mark universal wastes or containers of universal wastes to identify universal waste type. Specific wording required 	<ul style="list-style-type: none"> Comply with DOT requirements 	
Storage Time Limits (§014 or §025)	<ul style="list-style-type: none"> May accumulate universal wastes for one year. Dating required 	<ul style="list-style-type: none"> May accumulate universal wastes for one year with container dating required 	<ul style="list-style-type: none"> TEN DAY LIMIT at transfer facilities 	
Employee Training (§015 or §026)	<ul style="list-style-type: none"> Must inform all employees of proper handling of wastes and emergency procedures 	<ul style="list-style-type: none"> Must inform all employees of proper handling of wastes and emergency procedures 	<ul style="list-style-type: none"> Comply with DOT requirements 	
Response to Releases	<ul style="list-style-type: none"> Must immediately contain releases and handle residue properly 	<ul style="list-style-type: none"> Must immediately contain releases and handle residue properly 	<ul style="list-style-type: none"> Must immediately contain releases and handle residue properly Must transport universal waste only to other handlers, destination facilities, or foreign destination 	
Off-Site Shipments	<ul style="list-style-type: none"> Must send universal waste only to other universal waste handlers, destination facilities or foreign destinations 	<ul style="list-style-type: none"> Must send universal waste only to other universal waste handlers, destination facilities or foreign destinations 	<ul style="list-style-type: none"> Comply with DOT requirements 	
Tracking	<ul style="list-style-type: none"> No requirements 	<ul style="list-style-type: none"> Maintain basic records documenting shipments received and shipments sent off-site (§029) 	<ul style="list-style-type: none"> Comply with DOT requirements 	
Export Requirements	<ul style="list-style-type: none"> Comply with primary exporter requirements Obtain consent from the receiving country Provide a copy of the consent to the transporter 	<ul style="list-style-type: none"> Comply with primary exporter requirements Obtain consent from the receiving country Provide a copy of the consent to the transporter 	<ul style="list-style-type: none"> Shipping must conform to the EPA Acknowledgment of Consent A copy of the consent must accompany the shipment The shipment is delivered to the facility designated by the person initiating the shipment 	



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL GUIDANCE DOCUMENT

05-181

Revised February 2013

Aerosol Can Waste

This Environmental Guidance Document provides general and specific technical waste management guidance on aerosol can wastes. The discussion focuses on "empty" aerosol containers. Empty aerosol cans that are household waste are not considered hazardous waste.

What is an empty container?

- Title 128 – Nebraska Hazardous Waste Regulations, Chapter 2, §015 gives the definition of empty containers as it applies to the Resource Conservation and Recovery Act (RCRA). The next sentence underlines the elements of "RCRA empty." While the aerosol can might have all its contents removed using practices commonly employed to remove materials from that type of container, the generator must demonstrate that the aerosol can also has no more than one inch of residue or no more than 3% by weight of the total capacity remaining. A 16-ounce aerosol can should contain no more than 0.48 ounces of residual hazardous waste in order to be considered "RCRA empty."

Is the "RCRA empty" aerosol can a hazardous waste?

- "RCRA empty" aerosol cans are usually not hazardous waste due solely to the substances they once contained. If the empty container held a P-listed hazardous waste then the can would be P-listed (Title 128, Chapter 2, §015.05) until it was rendered empty by triple rinsing the contents (Title 128, Chapter 2, §015.05). Though, a P-listed aerosol product would be very rare.
- The "RCRA empty" aerosol can of and by itself is usually considered hazardous waste because it exhibits the characteristic of reactivity (D003). That is, it is capable of detonation or explosive reaction if it is subjected to a strong initiating source or it is heated under confinement (Title 128, Chapter 3, §009.01F). The empty aerosol cans generated in a month would normally need to be included in a facility's monthly hazardous waste totals unless they are managed as scrap metal. The characteristic of reactivity can generally be removed if the aerosol can is safely depressurized or emptied via puncturing. (see below)
- Title 128, Chapter 2, §015 excludes from hazardous waste regulation hazardous waste remaining in a "RCRA empty" container. If material is removed from the container that material no longer meets the exclusion condition as stated unless it is a U or P listed commercial chemical product. Title 128, Chapter 3, §015.03 states commercial chemical product residue remaining in a "RCRA empty" container cannot be U or P-listed hazardous waste.

- Note: An aerosol can that is not "RCRA empty" is almost always a D003 reactive waste, but it is also very often a hazardous waste due to the contents of the can. Three examples of cans that are often thought to be "empty" but are not are 1) an aerosol can that has lost its spray cap before the can has been used up, 2) an aerosol can that becomes clogged and fails to spray before the contents are used up, or 3) an aerosol can that the user just doesn't want any more before the contents are used up.
- Scrap Metal. If the aerosol can is essentially empty (no significant amount of liquid) and is being recycled for scrap metal, then it may be excluded from being hazardous waste and the issue of reactivity is moot. Unpunctured aerosol cans may be managed as scrap metal if they are "RCRA empty." Some scrap dealers will not accept "RCRA empty" cans that are not punctured. In this case, unpunctured "RCRA empty" cans may still be managed as scrap metal prior to puncturing because the hazardous waste regulations allow altering scrap metal on-site to enhance its value or to improve its handling.
 - Puncturing a "RCRA empty" aerosol can is considered processing and creates "excluded scrap metal" that is excluded from the definition of solid waste. (See Title 128, Chapter 2, §002.08, §002.09, and §008.14.)
 - An unpunctured "RCRA empty" aerosol can prior to puncturing is unprocessed scrap metal if it will be sent off as scrap metal. That can is also exempt from hazardous waste regulation per Title 128, Chapter 7, §002.03. In this case the scrap metal is still a solid waste with a specific exemption and is subject to speculative accumulation.
 - Caution: In order for an aerosol can to be eligible for any scrap metal exemption, it first must be "RCRA empty." If any aerosol cans are found in a container or pile of scrap metal that are not "RCRA empty," there could be an assumption that hazardous waste is being improperly managed and disposed.
 - The puncturing of a non-empty aerosol can in order to empty the container is analogous to pouring a can of acetone into a suitable container and then placing the "RCRA-empty" container in the trash as a non-hazardous waste (Title 128, Chapter 2, §015). That said, a hazardous waste or a container of hazardous waste comingled with scrap metal is allowed so long as appropriate small quantity generator (SQG) or large quantity generator (LQG) accumulation requirements are met for the container of comingled scrap and the hazardous SQG or LQG waste, assuming the materials are compatible. An example of this would be a container of "RCRA-empty" aerosol cans comingled with aerosol cans that are not empty but otherwise unwanted or unusable.

Who is affected?

- Once you've determined the aerosol cans are hazardous waste, you need to determine your generator status. Household hazardous waste is not regulated under RCRA. Conditionally exempt small quantity generators (CESQG) are not subject to any of the land disposal restrictions described below. A CESQG generates a total of 100 kilograms (220 lbs) or less of hazardous waste in a month. CESQGs are not subject to any of the SQG or LQG hazardous waste accumulation and labeling requirements or the hazardous waste manifesting requirements. A SQG generates between 100 kilograms (220 lbs) and 1000 kilograms (2,200 lbs) of hazardous waste in a month. A LQG generates 1000 kilograms (2,200 lbs) or more of hazardous waste per calendar month.

What can you put in the trash?

- CESQGs may send up to 19.5 kg (43 lbs) of hazardous waste to a regulated municipal landfill per day, up to a total of 100 kg (220 lbs) per month. Check your local landfill first. Some landfills, counties, and municipalities have more restrictive rules regarding waste disposal. This means a CESQG may place its unpunctured, "RCRA empty" aerosol cans in the trash if they have landfill approval. The department encourages recycling empty aerosol cans as scrap metal whenever feasible.
- Punctured and drained aerosol cans may be disposed in the trash. This applies to hazardous waste generators of all sizes. This does not apply to aerosol cans that contained acutely hazardous waste (P-listed). The department encourages recycling the empty aerosol cans as scrap metal whenever feasible.
- Small quantity and large quantity generators of hazardous waste must manage unpunctured, "RCRA empty" and non-empty aerosol cans, at a minimum, as D003 reactive hazardous waste or as scrap metal. SQGs and LQGs must not place these aerosol cans in the trash.

What about aerosol can puncturing?

The following discussion applies to aerosol cans not being managed as scrap metal.

- Aerosol can puncturing devices may be used to completely empty aerosol cans and also make them non-reactive. This is an allowed form of treatment if the puncturing operation is performed in a closed container. Most of the commercially available aerosol can puncturing systems meet this criteria. A punctured and drained aerosol can no longer exhibits the characteristic of reactivity and may be disposed in the trash. The exception is unless the aerosol can held an "acutely hazardous" material (this would be extremely unusual), which must be treated as hazardous waste due to its association with a P-listed waste. The department recommends recycling drained aerosol cans rather than disposing them.
 - If a SQG or LQG is treating aerosol cans to remove the characteristic of reactivity, the generator must develop and follow a written waste analysis plan (WAP) according to the land disposal restrictions (LDRs). The plan must be kept on site. See Title 128, Chapter 20, §005.01E1 for the WAP contents. Note: There is no need for a WAP if only legitimate scrap metal aerosol cans are being punctured – these cans are not hazardous waste.
 - Puncturing the can causes deactivation of the characteristic of reactivity and meets the DEACT treatment requirement of Title 128, Chapter 20, Table 9, Waste Code D003, "Explosives Subcategory based on Chapter 3, §009.01F through 009.01H." This is a LDR treatment standard.
 - Since a "RCRA empty" aerosol can, by definition, cannot contain hazardous waste, the can itself does not have any underlying hazardous constituents. Therefore, there are no Section 012 standards to meet as shown in the Non-wastewaters column for this Subcategory of D003 waste.
 - If the aerosol can was not "RCRA empty" prior to puncturing, the puncturing step creates a "RCRA empty" container that is not reactive and excluded from further hazardous waste regulation. As a result, there is no requirement to identify or treat for underlying hazardous constituents as stated in the Non-wastewaters column for this Subcategory of D003 waste.
 - The WAP should include the above discussion.

- There is no requirement to discuss detailed chemical analysis in the WAP for simple deactivation (DEACT) done by puncturing an aerosol can to render it non-hazardous and to meet LDR treatment standards.
- Once the can no longer exhibits a characteristic of hazardous waste and meets the land disposal restrictions, a one-time notification and certification must be placed in the generator's files and also sent to the NDEQ Waste Management Section if the punctured cans go to a landfill. See Title 128, Chapter 20, §006.04 et al. for a full description of the requirements. If you do send the punctured cans to a landfill, do not forget to include in your notification the name of the landfill receiving your waste. Note: This paragraph does not apply if the punctured cans are managed as scrap metal.
- The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requires empty pesticide containers be disposed per label instructions. If the label states not to puncture, then do not puncture. Pesticides include insecticides and herbicides. FIFRA applies to all hazardous waste generators including CESQGs.

More aerosol can puncturing considerations.

- The contents collected in the aerosol can puncturing drainage collection drum need to be correctly characterized. All waste generators must determine the quantity of hazardous waste they generate in a calendar month.
 - A log may be kept listing what chemicals are being placed in the drum. It is important the facility not only be able to state the correct waste codes, but also be able to identify all underlying hazardous constituents (UHCs) when that is appropriate (Title 128, Chapter 20, §006.01). Identification of UHCs is another LDR requirement and does apply to most characteristic hazardous waste that is drained into the drainage collection drum.
 - Without a good accounting system, a facility may put itself in the position of violating land disposal restriction regulations. (Conditionally exempt small quantity generators are not required to meet land disposal restrictions.)
 - In the event that a log was not kept, or there is some confusion as to the actual contents of the aerosol can puncturing drainage collection drum, the contents must be properly characterized via laboratory analysis. Collect a waste sample from the drum using a disposable Coliwasa (composite liquid waste sampler) tube that extends to the bottom of the container. Ship the waste for disposal only after you have received the analytical results for the waste, and are satisfied that the results are accurate and defensible.
- While not required by Title 128, we recommend a volatile organic compound (VOC) filter be used on the collection drum to control VOCs.
 - If used, the filter should be changed before it becomes ineffective.
 - The spent filter requires a waste determination. Test for any hazardous waste toxicity characteristic (TC) constituents that are present in the products that are collected from the empty aerosol cans. TC hazardous wastes are those 40 chemicals on Table 3 of Title 128, Chapter 3. For example, if empty aerosol paint cans contained methyl ethyl ketone (MEK), the MEK would normally be expected to be present in the VOC filter at some level. MEK is a TC contaminant, hazardous waste number D035.

- Aerosol can puncturing collection drums may be managed as a satellite accumulation container per Title 128, Chapter 9, §007.04. The waste must be accumulated at or near the point of generation under the control of the operator or operators of the process generating the waste. An aerosol can puncturing operation may meet satellite accumulation requirements if persons assigned to handle empty aerosol cans perform the operation. The collection drum must also be in an area so that the collection container is under their control.
- The collection container must be closed unless adding or removing waste. This is true for all hazardous waste accumulation containers at SQGs and LQGs. The department generally considers such drums closed if the puncturing device lid is closed and secured by the setscrew and a VOC filter is in place. Once full the collection container must be closed and moved to a hazardous waste storage area until it is characterized (see above). Hazardous waste storage requirements for CESQGs, SQGs and LQGs apply.

Waste codes.

- Material removed from a "RCRA empty" aerosol container.
 - If the removed material exhibits a hazardous waste characteristic (ignitable, reactive, corrosive, or toxic), it is considered newly generated characteristic hazardous waste. The waste is considered to be generated at the time the can was punctured. The appropriate waste codes must be used and UHCs identified as appropriate. Even CESQGs must count any hazardous waste generated towards their monthly total.
 - Residue coming from a container that has held a commercial chemical product (CCP) does not carry a U or P listing if the container was already "RCRA empty" (Title 128, Chapter 3, §015.03). However, if the residue exhibits any characteristic of hazardous waste such as ignitability or toxicity, then the contents would be hazardous waste due to the characteristic(s) regardless of any listing.
- Material removed from an aerosol container that was not "RCRA empty."
 - If the removed material exhibits a hazardous waste characteristic (ignitable, reactive, corrosive, or toxic), it is considered newly generated characteristic hazardous waste. The waste is considered to be generated at the time the can was punctured. The appropriate waste codes must be used and UHCs identified as appropriate. Even CESQGs must count any hazardous waste generated towards their monthly total.

- If the removed materials are CCPs, these would be "U" or "P" listed wastes. For example: If a non empty aerosol can of "Acme Super Solvent" composed of trichloroethylene were punctured, the correct waste code for the disposed residual solvent would be U228, not F001 or F002. (Remember, the solvent coming out of the punctured aerosol can is not a "spent" solvent -- it is unused, but still usable solvent.) Also note that CCPs on the "U" or "P" lists are technical grade ("pure") or sole active ingredient. Using the same example, if the MSDS of the above "Acme Super Solvent" trichloroethylene aerosol showed both trichloroethylene and carbon dioxide, it would be a U228 because the CO2 is not an active ingredient -- it is a propellant, and the trichloroethylene is the solvent -- the sole solvent. On the other hand, if an aerosol can held two active ingredients, the disposed solvent is not "U" or "P" listed waste. For example, if the aerosol can held spray solvent and the ingredients were xylene, toluene, and CO2, the disposed solvent would not be U239, U220, F003, or F005. The disposed solvent would be a D001 hazardous waste for ignitability. Even CESQGs must count any hazardous waste generated towards their monthly total.

Final Thoughts:

Note that CESQGs are not required to meet hazardous waste storage requirements if the total facility accumulated CESQG hazardous waste is less than 1,000 kg (2,200 lbs). However, as a best management practice, the department recommends CESQGs routinely manage their hazardous waste as close to SQG requirements as practical. In addition to safer management of hazardous materials, this practice also serves to keep the generator in compliance if it becomes an episodic SQG.

HELPFUL WEB SITES:

- Title 128 – Nebraska Hazardous Waste Regulations: <http://deg.ne.gov/> and click on "Rules and Regulations"
- MSDS information: <http://www.ilpi.com/msds> (NDEQ does not endorse any public or private website.)

CONTACTS:

- NDEQ Hazardous Waste Compliance Assistance (402) 471-8308
- NDEQ Waste Management Section (402) 471-4210
- NDEQ Toll Free Number (877) 253-2603

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